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ABSTRACT

The suggested guide is presented to serve secondary and postsecondary administrators, program faculties, admission officers, and others in their efforts to alleviate articulation problems experienced by students in making the transition from secondary to postsecondary educational programs. The focus is on individual articulation from any secondary program or intervening employment to private, public, or employer based programs and institutions. The scope includes all programs of career preparation representing occupations from any of the 15 clusters outlined by the U. S. Office of Education. The body of the guide is divided into two main sections. The first discusses articulation problems--admission policies and requirements, student services and assistance programs, and transition management. The second section outlines operational procedures and methods of implementation. Each operational procedure corresponds to a set of articulation problems outlined in the first section. They cover: communication, articulation arrangements, curriculum development, recruitment, program coordination, guidance and counseling of students, entrance requirements, student appraisal, developmental and special student programs, continuing education programs, and programs and services to meet special needs. (An eight-page bibliography is included.) (AG)

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STUDENT ARTICULATION BETWEEN SECONDARY AND POST-SECONDARY EDUCATION

A SUGGESTED GUIDE

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INTRODUCTION

Without the concern and interest of responsible educators the educational path will remain rocky and full of deadends for many students. Educators who are truly concerned for the student will accept the charge presented and use the suggestions in the guide to their maximum potential.

PURPOSE

The suggested guide is presented to serve secondary and post-secondary administrators, program faculties, admission officers and other representatives in their efforts to alleviate articulation problems experienced by students in making the transition from secondary to post-secondary educational programs. Although personnel of the receiving program or institution are primarily responsible for initiating and implementing appropriate articulation procedures, the personnel of the sending program or institution must communicate their concerns for alleviating student problems in the articulation process.

Many articulation problems exist for individuals who currently choose full-time employment and for students in their movement within and between educational programs or institutions that are either secondary or post-secondary in nature. However, the focus of the guide is on individual articulation from any secondary program or intervening employment to private, public or employer based programs and institutions such as community colleges, trade schools, technical institutes, baccalaureate institutions, manpower programs and apprenticeship or other employer conducted training programs.

An assumption is made that appropriate curricula exist or will be developed which meets the students' needs. It is also assumed that the students' career choice-making activities and perceptions of their needs have given adequate consideration to employer needs and employment opportunities.

Initially the guide was to be applicable to five career education occupational clusters. Those clusters were communications media, construction, manufacturing, public service and transportation. The scope was broadened to include all programs of career preparation representing occupations from any of the fifteen clusters proposed by the United States Office of Education. Therefore, the guide is applicable to all educational programs which provide skilled workers, technicians, specialists or professionals with the special competencies needed for employment in an occupation or closely related group of occupations.

TERMINOLOGY

A few terms are briefly described with regard to their usage in the guide. Although some readers may not agree with the definitions, they are presented in the interest of clarity and reference.

Articulation refers to the relationships between educational programs which are designed to provide a smooth transition for the student from one educational program to another. This movement of the student between programs can be either horizontal or vertical.

Horizontal articulation includes those relationships between programs, courses or activities which exist at any one educational competency level and provide a coordinated educational program for the student. Vertical articulation refers to those relationships which exist between institutions, programs,

courses or activities and provide a coordinated program for a student moving from one educational competency level to the next.

Career education is a planned program of activities and experiences which facilitates satisfying and productive career development. Career development is the continuous life-long process through which individuals choose, prepare for, participate in and adjust to work environments. Career education is comprised of three major phases to coincide with career development. The first phase consists of activities and experiences which facilitate realistic career choice-making behavior, including educational program selection. The second phase is made up primarily of programs to assist individuals in developing the special competencies needed for participation in work environments to which they have made at least some tentative commitments. The third phase consists of programs which help individuals to enter, participate, adjust and advance in selected work environments. This phase may involve assistance in making new choices, retraining and updating competencies for continued employment or advancement and, therefore, may need to make provisions for special programs whereby individuals can recycle through necessary parts of the first two phases.

Occupational education refers to those programs which focus on the second or preparation phase of career education. It is also a necessary part of some of the continuing education programs in the third career education phase.

Adult and continuing education refers to those special programs for individuals whose current basic concern is as a full-time worker as opposed to being a full-time student. Some of those programs are occupational in nature.

RATIONALE

Students are faced with many complex problems when trying to make career choices as well as the choice of the program or institution in which to pursue that career choice. The problems are multi-faceted in that they may be student-generated, administrative, institutional, financial, geographical or sociological in nature.

It is anticipated that the implementation of career education programs, or increased emphasis on these programs, will affect articulation problems. Different implementation patterns and differences in the variety and quality of programs may intensify some problems and bring others to the forefront. Students with a broad background in career education and those with very little or none will be seeking admittance to the same kinds of post-secondary programs.

Various rates of implementing career education and the fact that each year some students may have participated in a longer sequence of career education activities will generate a different kind of student population each year for both secondary and post-secondary programs. Students will be more aware of their educational needs and will be seeking programs which may not presently exist and rejecting those which become obsolete. Some problems may be alleviated by the students' improved ability in career decision-making and a firmer commitment before entry into a preparation program.

Through the implementation of career education in elementary and secondary schools, students leaving them will have increased knowledge concerning occupations and, in many cases, job-entry abilities and skills. Students may have completed career awareness, orientation and exploration programs which were designed to provide some hands-on experience and a knowledge of a variety of occupations in the world of work. Students who have completed the preparation phase of career education in a secondary program could have

developed occupational competencies which open the doors to employment, to advanced education in a post-secondary program, or both.

Two kinds of students will leave elementary-secondary programs: those who graduate and those who choose the alternatives of employment or other educational programs without graduating. Major problems facing both kinds are "Where do I go from here?" and "How do I get there?".

Students who choose the employment alternative without graduating or without some adequate career preparation often face limited employment opportunities. Work may be limited to menial part-time jobs or full-time jobs with little chance for advancement. Educators should be concerned enough about these students to identify them and provide them the opportunity to participate in intensive programs. Such programs should allow students to develop minimum occupational competencies for entering an occupation in which they are interested.

Graduates of secondary programs have at least three broad choices, depending upon the program pursued in the secondary school. They may enter the world of work, continue educational preparation in some post-secondary program or enter a post-secondary program after an intervention such as employment or military service. Out of each of these decisions many options arise. If they decide to pursue post-secondary education, the alternatives facing them are numerous. Regardless of the form of post-secondary education pursued, the student should be able to make the transition from high school to the post-secondary setting with a minimum of duplicated learning activities.

The basic concern throughout the educational spectrum is for students and the maximum development of their potentials. "Is it possible to provide a smoother transition for the student from one educational program to the next?" "Who should be concerned with student articulation between secondary and post-secondary programs?" "What can educators do to provide a smoother transition for the student?" "How can appropriate articulation be achieved?" Each of these questions are of major concern to educators.

The career education clusters of occupations proposed by the United States Office of Education seem to be a convenient system for organizing the world of work to serve an unobtrusive function in the student's preparation for making career decisions. These clusters have probably served their intended purpose when the student has made occupational choices with some commitment to implementing those choices. Grouping occupations by related knowledge and skill requirements may be more appropriate in occupational education or the preparation for employment phase of career education.

"When, in the student's educational program, should we educators become concerned about student articulation between secondary and post-secondary programs?" Articulation should be a continuous process which begins early in the students' school lives and continues as long as they participate in educational programs. Articulation to post-secondary programs should start to receive major emphasis when students are in the 7th - 9th grade. With successful implementation of career education, this is when students will begin making some rather realistic educational and occupational plans. Management of the student's transition to post-secondary education should be long range and not a "last ditch" effort at the end of the secondary program.

METHODOLOGY

The development of the guide was accomplished in four phases:

. . . Phase 1 — a review of the literature and contact with institutions,

agencies and projects to identify existing and potential articulation problems;

. . . Phase 2 — a workshop with the project Advisory Committee consisting of 17 nationally known occupational educators representing employers and both secondary and post-secondary education; and synthesis of the information gleaned through Phase 1 and the Advisory Committee Workshop into a rough draft of the guide;

. . . Phase 3 — a workshop with the project Review Committee consisting of 17 nationally known occupational educators representing employers and both secondary and post-secondary education to review a rough draft of the guide; and

. . . Phase 4 — revision and final production of the guide.

Input from occupational educators throughout the project was obtained through the use of letters of inquiry, professional meetings and conventions and a survey instrument for evaluating proposed operational procedures and methods of implementation. As indicated by the selected bibliography, a rather exhaustive review of the literature was used in the preparation of the guide.

This guide presents problems which students may encounter in making the transition between institutions and operational procedures for alleviating these problems. Since the implementation of several operational procedures and methods of implementation may be necessary in alleviating one or more problems, no attempt was made to match a particular problem to a particular operational procedure or method of implementation. Instead, the problems are grouped in general areas which correspond to operational procedures. As an example, problems listed under the heading of "Entrance into an Institution" can be alleviated by implementing some or all of the methods listed under Operational Procedure 7, Entrance Into An Institution. However, it is important to note that the implementation of other operational procedures and methods will also help in alleviating problems listed under "Entrance Into An Institution".

ARTICULATION PROBLEMS

This section presents articulation problems which a student may encounter in moving from a secondary educational program to a post-secondary program. The problems presented here are not all inclusive and all may not be encountered by any one student. Rather, these suggested problems represent a synthesis of articulation problems that educators at both secondary and post-secondary institutions agree are major problems which students in many post-secondary institutions have encountered.

ADMISSION POLICIES AND REQUIREMENTS

Many post-secondary educational institutions, in an attempt to provide quality education, have devised policies which aid in the selection of potential students who have the aptitude to do baccalaureate work. These policies tend to be discriminatory toward many students not considered as potential baccalaureate students. Many institutions have instituted open-door admission programs designed to include students other than the traditional "college-bound" students.

Problems relative to admissions into an institution, as well as a program, have been identified. These problems have served as barriers to many students in their attempt to obtain an education that would assist in their becoming employable.

Entrance into an Institution

When entering an institution, the student often encounters problems which impede or, in many cases, prohibit admission to that particular institution. The following problems affect students when they are trying to gain entrance into an institution.

Varying Entrance Requirements & Selection of Students

. . . Many secondary school personnel and students have not readily accepted the right of post-secondary institutions to select students for entrance into the institution and/or specific program. The fact that post-secondary institution entrance requirements range from "open-door" admissions to rigorous, selective admissions often causes students difficulty in selecting an appropriate program to meet their educational objectives.

Use of Student Information Requested by Registrar

. . . Because of inadequate admissions staff and the limited knowledge of many admissions officers concerning occupational programs, a large amount of information about students requested from secondary schools is often not used to its maximum potential. Many times the difficulty lies in a lack of communication and coordination between and within institutions.

Identification of Student Program Objectives

Once students have sought admission to a post-secondary institution, more complex problems are imminent when they seek entrance into a specific program. The broad background of work and educational experiences that students may bring to the post-secondary institution will play a role in their career objectives. Some students may enter an institution with a career choice previously made. However, research indicates that many students enter post-secondary institutions without clearly defined career goals. Upon seeking admission to a specific program, many students encounter the realistic need to make a definite career choice. The problems presented here affect many students seeking admission to an academic or occupational program.

Programs Requiring Prerequisites

. . . Programs with required prerequisites, (i.e., math, English, science, etc . . .), often are discriminating in the number, sex and types of students admitted. Even though prospective students may possess the competencies required, they may be denied admission to the program.

Variations in Completion Requirements

. . . Post-secondary institutions have differences in completion requirements for the same occupational programs. The differences are usually in the time (i.e., number of clock hours or semester hours required for completion) and/or the amount of traditional or standardized courses required for completion.

. . . Prerequisite admissions requirements of many post-secondary institutions do not reflect the competencies needed by students entering their programs. A student with an inadequate educational background may have difficulty in achieving; whereas the student with advanced preparation may be forced to repeat the same subject matter. As a result, students may be "left behind" or "bored" and ultimately leave the program.

Student Appraisal

One of the most controversial issues facing educational institutions today is testing of students for admission to institutions and programs. Students entering most post-secondary institutions are presented with various forms of admission tests. In many cases these tests are used for selection of students. Because of the varied backgrounds and ethnic origins of students, most of these tests are biased. In addition, the variety of age groups entering post-secondary institutions makes it difficult to appraise the entering students en masse. The evaluation of the student as an individual upon entrance to an institution or a program is necessary. However, many post-secondary institutions do not

utilize the information gathered through this evaluation to its maximum potential or to benefit the student. Included in the following are articulation problems which many students encounter in seeking admission to a post-secondary institution or program.

A. Evaluative Testing and Analysis:

Performance Testing

. . . Evaluation of student entrance by performance testing is not utilized by most post-secondary institutions. Students are often not given the opportunity to display occupational competencies to obtain credit by examination or advanced placement in a course because of the lack of performance-based evaluations in most occupational programs.

Standardization of Testing

. . . Most standardized achievement and aptitude tests administered in secondary and post-secondary schools are sex and culturally biased and do not allow for individual differences or levels within technologies. Too much emphasis is placed upon the results of a single test score.

B. Developing and Beginning the Student's Program

Advanced Placement

. . . The utilization of advanced placement tests by post-secondary institutions is often impeded by such factors as inadequate monitoring and feedback from the institution administering the tests, reluctance of some institutions to honor credits earned by students taking advance placement tests and the limited knowledge of the students concerning the availability of advanced placement opportunities or requirements.

Work Experience Credit

. . . Many students with military or previous work experience or on-the-job training do not receive any consideration for credit in occupational programs. Many post-secondary institutions have not designed methods to evaluate a student's previous military or work experience.

Transfer of Courses

. . . The acceptance of occupational courses taken in secondary programs which are similar to post-secondary oc-

cupational programs is difficult since most post-secondary institutions do not generally award credits for courses completed in secondary institutions. The student with advanced skills obtained in a secondary occupational program often is not provided the opportunity to obtain course credits in a similar post-secondary program through transfer of some of the secondary occupational courses.

Developmental Programs and Special Programs for Students

All students do not exhibit the same characteristics when entering a post-secondary institution or program. Many students have not acquired the necessary knowledges and skills to succeed in their selected occupational program. Often they lack proficiency in language skills, mathematics and organized science information. Other students may have attained advanced knowledges and skills in a particular area. Students entering the institution or program have individual skills, attitudes and abilities which will affect their performance in the post-secondary institution.

Developmental Courses

. . . Many secondary students do not take the required secondary courses needed for entry to many post-secondary institutions. Since there are no uniform policies regarding developmental programs, some institutions have too many while others lack programs or courses needed in the proper sequence.

Prerequisites

. . . Many post-secondary institutions fail to offer prerequisites for occupational courses regarded as college level when students needing introductory courses enroll in the occupational program.

Orientation Programs

. . . Educational institutions often do not provide sufficient orientation programs, especially for students with special needs.

Peer and Tutorial Services

. . . Too little effort is directed toward identifying students with evident abilities who need developmental programs. Sufficient effort is not expended to identify students who have deficiencies that would prevent them from entering certain educational programs. Students with leadership abilities are not identified to be placed in

specific developmental programs such as peer tutoring nor are students with deficiencies identified who could benefit from special tutorial or developmental programs when they are admitted.

Continuing Education Programs

The adult population is a source of potential students which many post-secondary institutions have not utilized. The adult population includes: recent high school graduates; returnees from the military; older adults who have retired or are changing careers; housewives; and adults returning from the labor force and seeking upgrading or preparation for a different career. Most adults have immediate educational needs whereas the recent high school graduate may have long range needs. Many adults have clearly defined goals when they enroll in an institution for training, retraining, or to satisfy avocational interests. However, the individual characteristics of the adult student will be more varied than the recent high school graduate. Adult students will probably have work experience which may or may not relate to the program they enter. This may be true of educational training, on-the-job training or training in other educational settings.

Employment

. . . Enough emphasis is not given to determining the abilities and interests of adults for occupational training or retraining. Many occupational programs are currently geared for the needs of the youth and are not always offered at a time and cost equitable to meet the needs of the adults.

. . . Most adult students are not evaluated and placed in occupational programs according to their previous educational and occupational experiences. The adult student, in most cases, is not given consideration for previous work experiences outside of formal education.

Cultural, Social and Artistic

. . . Adult needs are more complex than those of younger students. With the present educational structure, there is a lack of concern for aiding adults in meeting their cultural, social and artistic needs.

. . . Many post-secondary institutions do not provide adults with activities of an avocational nature. Many adults seek activities which will be interesting and/or profitable upon retirement.

STUDENT SERVICES AND ASSISTANCE PROGRAMS

Upon seeking entrance to a post-secondary program, the student often encounters problems other than those in the admissions procedures. At various points throughout an educational program, students need professional guidance and counseling to some extent. Many students need assistance in clarifying career goals while other students may need assistance in identifying programs to meet their career goals in making personal adjustments or in meeting the financial obligations necessary to succeed in a post-secondary educational program.

Guidance and Counseling of Students

While some students enter a post-secondary institution with a previously determined career choice, many students need guidance and counseling in making a career choice or in deciding what program to pursue until a career choice has been made. Some students need assistance in qualifying for a particular program while others may need help in identifying opportunities for advancement in a program.

Counseling Staff Size

. . . Counseling staffs of both secondary and post-secondary institutions are often inadequate for the student load. The staffs are sometimes loaded down with so many tasks that they are unable to fulfill the needs of the students where career guidance is concerned. Many post-secondary and secondary institutions do not utilize the guidance function of the counselor or the teacher-counselor team effort in guidance.

Qualifications of Counseling Staff

. . . The counseling staff of many educational institutions has difficulty in relating to students with special needs and problems. The lack of occupational experience and training in working with special needs places the counselors at a disadvantage in perceiving individual problems and trying to relate to the students.

Counseling with the Student

. . . Many students are required to choose a course of study or make other educational decisions before they have adequate knowledge of available occupational programs and employment opportunities. Sometimes the student has a difficult time understanding the necessity of obtaining a saleable skill.

Programs to Meet Special Needs

Students entering a post-secondary institution do not have the same characteristics or abilities. Some students need special activities or programs to help them become productive members of society. Students may need special activities or programs because of cultural, economic, psychological or physical reasons.

Financial

. . . There appears to be too few attempts to provide or make known financial assistance to occupational students. Since many scholarships and leadership activities are based on academic achievement, occupational students are often considered ineligible because occupational courses are considered nonacademic by many educational institutions.

Handicapped Students

. . . Not enough effort is made by most educational institutions to acquaint the student with special needs with the current workforce trends as well as educational and financial assistance available for up-grading or obtaining an occupational skill.

Disadvantaged Students

. . . The educational and economic disadvantaged or handicapped student is sometimes denied admission to a program because of a lack of finances, specially trained staff and/or special equipment/facilities in the schools. Students with educational deficiencies are sometimes not provided the opportunity to utilize developmental courses to eliminate these deficiencies. Not enough effort is given to identifying students with special needs and potential drop outs early in their educational career and providing programs to bring them up to job entry level.

TRANSITION MANAGEMENT

Movement from one educational institution to another is a major change for most students. Students entering a post-secondary institution often have problems in adjusting to the many different aspects of the new educational system. The student enters the institution unfamiliar, for the most part, with the advantages and limitations of post-secondary educational programs. Students are forced to accept new types of responsibilities. Many decisions concerning their future must be made at various points in the post-secondary programs. Lack of knowledge by most students of the intricacies of post-secondary

institutions and programs affects the smooth transition of the student from a secondary institution to a post-secondary institution.

Communications

Many students do not receive maximum benefit from their post-secondary program because of a lack of knowledge of the advantages and limitations of the program. Communication between institutions affects the operation and development of educational programs. Communication between personnel involved in the management of the transition of the student affects the student's transition between institutions.

Communication Between Faculties, Programs, Institutions and other Agencies and Organizations

. . . The faculties and representatives of many secondary and post-secondary schools are not knowledgeable of what the other schools are striving to accomplish. This lack of communication causes duplication of effort as well as conflicts within and between institutions.

Articulation Agreements

. . . Very few attempts have been made to develop articulation agreements between secondary and post-secondary occupational programs at the local, regional or state level.

Philosophy of Occupational Programs

. . . Secondary and post-secondary institutions often have conflicting philosophies between and among institutions about the purpose of occupational education. This results in communication problems, course duplication, failure of students to succeed and misinformation on transfer guidelines.

Secondary Occupational Programs

. . . The classification, evaluation and acceptance of secondary and post-secondary programs is difficult and the content is hard to determine because of the various course descriptions and titles for the same course or courses. This becomes a particular problem for students entering post-secondary institutions from similar secondary programs.

Coordination of Programs

Educational programs intended to prepare students for employment quite often lack coordination between and among the various educational institutions and employers.

Sharing Equipment, Facilities and Faculty

. . . The cost of adding new equipment and building new facilities is prohibitive for occupational programs that need up-dating or expanding. This results in many institutions not accepting or teaching the state-of-the-art. Many secondary and post-secondary institutions have not attempted to share facilities and equipment for the purpose of decreasing the cost of up-dating and expanding new and/or existing programs.

Duplication of Course Offerings

. . . Many secondary administrators are not aware of the post-secondary course requirements and vice-versa. This results in broad duplication of courses and some substandard course offerings. The progress of the students toward attaining their goals is often slowed or arrested because of educational programs which are not coordinated between secondary and post-secondary institutions.

Curriculum Development

. . . Many institutions have not designed their curricula, methods of instruction, guidance services and admission practices to meet the needs of their students. As a result, courses are not offered at the most opportune time for a large portion of the adult population. Also a large percentage of secondary schools still overemphasize the college preparatory programs and neglect occupational and other career programs.

. . . Many administrators and curriculum developers do not utilize employers, labor unions, apprenticeship programs and other employment related organizations in determining job entry requirements and competencies.

Cooperative Plans

. . . Many secondary and post-secondary institutions have made few efforts to develop cooperative plans for implementing or developing programs, course content, admission policies and procedures, transfer guidelines and placement guidelines. This causes a wide variety of policies and procedures among the institutions.

Recruitment by Institutions

Attracting students to enroll is important to many post-secondary institutions to maintain or implement programs. Post-secondary institutions are often competitive in promoting enrollment. In some instances, students are not accurately informed as to the advantages and limitations of enrolling in a particular institution or program. Some students become dissatisfied with their educational program and drop out because of unfulfilled promises made by some post-secondary institutions.

Publications

. . . Publications and brochures of many educational institutions are of a promotional nature and do not always help the students select the best program for their individual needs. The problem is enlarged by the fact that many institutions do not have adequate information describing the occupational programs to facilitate adequate recruiting and placement activities. Many do not adequately portray the opportunities for women in careers traditionally considered to be for men and vice versa.

Visitations

. . . Post-secondary institution representatives who visit secondary programs to recruit are often not fully informed about some of the occupational programs and sometimes oversell the institution to the prospective students. Visits to post-secondary institutions by the prospective students and their parents are not utilized as a recruitment activity by many post-secondary institutions.

OPERATIONAL PROCEDURES AND METHODS OF IMPLEMENTATION

As indicated before, there are numerous problems facing students making the transition from a secondary educational program to a post-secondary program. The types of problems as well as the complexity of the problems vary from student to student. The student, on one end of the educational spectrum may be a recent graduate of a high school program or, on the other end, an adult who dropped out of the high school program and is now enrolling to either upgrade skills and knowledges attained in industry or to obtain new skills and knowledges. Other students who may be enrolling include: young adults who are returning to school from military services or employment; military retirees seeking new training; housewives who are seeking occupational or avocational programs; and older adults from the labor force. The student may be seeking programs of an avocational or vocational nature.

Every student or potential student cannot be treated in the same manner. The varied backgrounds, interests, abilities and goals compel educators to consider each student as an individual with unique characteristics and goals. The educational program, from recruitment through completion, should be flexible to allow for these differences.

• It is an impossible task to identify every problem the student will face. It is also impossible to identify or suggest every possible solution to these problems. The material presented in this section is, therefore, only suggested articulation practices which, if implemented, should overcome many of the articulation problems the student faces in making the transition from a secondary program to a post-secondary program.

The articulation practices presented in this section are organized into operational procedures and suggested methods of implementation. Each operational procedure corresponds to a set of articulation problems previously outlined. However, because of the commonalities that exist in many problem areas, the operational procedures and their methods of implementation will also be useful in alleviating problems in other areas. As an example, operational procedures designed to alleviate problems involving entrance into an institution may also help in alleviating problems involving communication or curriculum development. The following operational procedures and their methods of implementation are presented as suggestions to alleviating articulation problems from secondary to post-secondary institutions.

OPERATIONAL PROCEDURE 1

COMMUNICATION

A recognized channel for communication between secondary and post-secondary institutions for faculty, students, administrators, admissions officers and counselors should be established and actively maintained to provide a means for the exchange of information, materials and other matters pertinent to the transition of the student from a high school to a post-secondary program.

There should be a two-way channel for informing, developing, analyzing, evaluating and interpreting all matters relevant to the education of the student. The post-secondary institutions should take the initiative in organizing and maintaining this channel of communication. However, secondary institutions should initiate communication activities in the absence of efforts by the post-secondary institution. Both the secondary and post-secondary institutions should be accountable for establishing this two-way channel of communication.

Methods of Implementation:

. . . **A Program Articulation Committee consisting of representatives from secondary and post-secondary institutions should meet regularly to discuss and develop uniform program policies, procedures, requirements and curricula. The Program Articulation Committee should be utilized to consider problems the student has in making the transition from high school to a post-secondary institution and identify articulation solutions to these problems. This committee should consist of a secondary program faculty member, post-secondary department head, post-secondary faculty member, an employer and employee from the employer Advisory Committee and a student in the program. The meetings of this committee could lead to the sharing of labor market information by geographic region.**

. . . **An Institutional Admissions Committee should be established to consider problems dealing with institutional entrance requirements. This committee should consist of**

post-secondary faculty members, department heads, admissions officers, administrators and secondary school representatives.

. . . Counselors at the secondary and post-secondary levels should meet regularly to exchange information and discuss matters pertinent to the career counseling and guidance of students. This could include the sharing of information on developmental programs, students services and entrance programs.

. . . Secondary and post-secondary faculties should be encouraged and reimbursed, if possible, to attend meetings and participate in regional, state and national associations of their respective occupational areas.

. . . Whenever feasible, secondary and post-secondary institutions should utilize the same employer Advisory Committee. If this is not possible, at least one employer representative should serve on both the secondary and post-secondary employer Advisory Committee for each occupational area. This would help in coordinating the occupational programs at the secondary and post-secondary institutions.

. . . Post-secondary institutions should strive to maintain communication with other institutions concerning policies, procedures, programs and requirements. This channel of communication could be maintained through an Institutional Articulation Committee. This committee should also coordinate articulation activities between programs within the institution. This committee should be composed of a representative of each program articulation committee (usually the department head), the occupational administrator, (dean or director), an institution administrator, an admissions officer, counselors and a representative of the board of directors of the institution concerned.

The implementation of all or a portion of the suggested alternatives will alleviate such articulation problems as: misconception among secondary and post-secondary faculties concerning their counterpart programs; program coordination between secondary and post-secondary levels; understanding of conflicting philosophies of career education; knowledge of admissions personnel about educational programs at secondary and post-secondary institutions;

lack of knowledge concerning admissions policies and procedures and program requirements; developmental programs; and curriculum development in secondary and post-secondary institutions. To improve articulation between any institutions, communication must exist.

OPERATIONAL PROCEDURE 2

ARTICULATION ARRANGEMENTS

Working arrangements for vertical articulation between and among educational institutions should be cooperatively established by representatives of secondary and post-secondary faculties, counselors, administrators, admission officers, employer advisory committees and students. These arrangements should be developed on the local, regional and state levels and should be commonly understood for use by the secondary and post-secondary institutions. These articulation arrangements should be reviewed and adjusted as conditions and programs change.

Articulation arrangements between secondary and post-secondary institutions concerning all phases of the educational system are essential in providing well-coordinated educational opportunities for the student. Articulation arrangements should be formal written statements between two or more institutions. The post-secondary institutions should take the initiative in developing these articulation arrangements. In the absence of articulation activities, secondary representatives should initiate activities with post-secondary institutions to begin the development of articulation arrangements.

Methods of Implementation:

. . . **Program Articulation Committees should be established at the local level for each program area to develop and revise, on a regular basis, articulation agreements for each program area. This committee should consist of both secondary and post-secondary representatives. (See Communication)**

. . . **An Institutional Articulation Committee should be established to consider articulation problems on an institution wide basis. This committee should meet at least semi-annually. The purpose of this committee should be to provide a coordinated effort between and among programs within the institution. (See Communication)**

. . . **Where virtually no coordinated articulation arrangements exist between and among institutions, articulation workshops or seminars should be held between secondary and post-secondary institutions to establish working articulation arrangements.**

. . . **Representatives of post-secondary institutions should meet on a regional and/or state-wide basis to consider articulation problems at the local, regional and state levels. This activity should be coordinated by a representative of the state education agency responsible for supervising articulation activities**

The implementation of all or part of these practices will assist in alleviating such articulation problems as: communication between and among educational institutions; understanding of occupational programs offered at each level; unnecessary duplication of course offerings; policies and procedures for admissions; student services and developmental programs; advanced placement; and program coordination between institutions. The utilization of an articulation network or system which is organized from the program level through the state level would be very influential in alleviating many articulation problems.

OPERATIONAL PROCEDURE 3
CURRICULUM DEVELOPMENT

Secondary and post-secondary institutions should develop the curricula such that students may proceed through an occupational program at a rate commensurate with their abilities and skills. The curricula for the secondary and post-secondary programs should be organized such that a minimum duplication of courses for the student exists in progressing from one educational institution to the next.

Because of the variability of the background of the students, attention must be given to the career goals of each individual in order for the institutions to meet the needs of the students. Students should be permitted to enroll in a program at the level they are capable of performing, whether at an advanced level or a developmental level, and proceed through the program to completion. Some students may complete the program at an early da'e while others may require a longer period of time.

Methods of Implementation:

. . . **Secondary and post-secondary faculties should cooperatively develop curricula that are complementary and involve a minimum amount of duplication of course work. The curricula should be as individualized as possible and designed such that the student can progress through successive stages at either secondary or post-secondary institutions with a minimum amount of duplication of effort.**

. . . **Secondary and post-secondary institutions should organize the curricula into small learning modules. Performance objectives should be designed for progress through the module, the course and ultimately the program by the student. Student entry into the program should be at whatever stage or module the student is capable of performing.**

. . . Secondary and post-secondary institutions should utilize some form of record keeping to document the students' competencies as they progress through each educational program. A skills and competency check list signed by each instructor would be one method of keeping up with the progress of the student. The skills and competency check-list completed at a secondary institution could be used for placement into a post-secondary occupational program.

. . . The curricula for each occupational program should be progressive from one educational institution to the next with built-in opportunities for developmental programs. The Program Articulation Committee should contribute to the development and revision of the curricula for each occupational program. The needs of employers and the community should be assessed and represented when curricula are developed and revised.

. . . Secondary and post-secondary faculty members should share each other's curriculum outline, guides and materials. The curricular materials could be developed jointly to provide maximum benefit to the student.

. . . Secondary and post-secondary institutions should provide specialized courses and/or programs for students who need these activities. This could be in terms of short courses and should be offered at hours available to students of all ages.

The implementation of these alternatives will help solve articulation problems in such areas as: curriculum development; student achievement; student entry into programs; and completion of programs by students. A curriculum should be designed to meet the needs of the student in terms of employer needs. The curriculum should be utilized to maximize the students' opportunities in achieving their career goals. This necessitates a flexible curriculum organized in small learning modules which permit students to enter at an advanced stage or a developmental stage and exit at a time commensurate with their abilities and skills.

OPERATIONAL PROCEDURE 4
RECRUITMENT BY INSTITUTIONS

Post-secondary institutions should clearly inform potential students of the advantages as well as limitations of attending the institution.

Students should not be misled into enrolling into an institution or program which will not satisfy their educational goals. If the institution is seeking a specific clientele, the potential students should be alerted to the requirements and restrictions. The post-secondary institution should present factual data to the potential student which describes the total atmosphere and purpose of the institution or program.

Methods of Implementation:

. . . **Drop outs and potential drop outs in secondary schools should be alerted to the occupational program opportunities at the post-secondary institutions. This is not to imply that post-secondary institutions should try to encourage students to drop out of a secondary program to attend a post-secondary program.**

. . . **A post-secondary institution could circulate a bulletin or newsletter at least four times a year to the secondary schools in its service area for the purpose of informing potential students of the admissions policies and other pertinent information concerning the institution.**

. . . **Post-secondary institutions should utilize various forms of media in the recruitment of students. They could incorporate aspects of the home-based career education model. Post-secondary institutions should also utilize employers in recruitment activities.**

. . . **A post-secondary institution should conduct "Career-Day" and "Career-Night" activities for secondary schools in its service area. Parents, students and other adults in the community should be invited to attend these activities. Former students and employers should participate in these recruitment activities.**

. . . Brochures should be developed by post-secondary institutions to describe the opportunities and program requirements of each occupational program. Information such as job availability, possible locations of employment and the average starting salaries should be included in these publications. Post-secondary institutions should strive to make women aware of the opportunities in careers which have normally been considered to be for men only and vice versa.

The implementation of these alternatives will help alleviate such problems as: student information about programs and institutions; visitations to high schools; misleading brochures and recruitment practices; and community knowledge and utilization of occupational programs.

OPERATIONAL PROCEDURE 5
COORDINATION OF PROGRAMS

Secondary and post-secondary institutions should provide well-coordinated occupational programs for the students. Institutions should cooperate in sharing facilities, sharing occupational instructors, developing curricula for the programs and program organization. The occupational programs should be designed at both secondary and post-secondary institutions such that the student can progress through the programs with a minimum amount of duplication.

One of the most important aspects of an articulated educational program is the coordination of the secondary and post-secondary occupational programs. The curricula utilized in these programs should be complementary to each other. This implies that the program philosophy of the institutions should be analogous. Secondary and post-secondary faculties should strive to provide the student with curricula which is continuous and designed to expedite the progression of the student.

Methods of Implementation:

. . . **A coordinated plan between secondary and post-secondary institutions should be developed for the joint utilization or sharing of the facilities and equipment required for expensive occupational programs. Many occupational programs are not offered at either secondary or post-secondary institutions because of their exhorbitant cost. Through cooperative agreements, a plan could be devised allowing for joint purchase and usage of equipment or for the use of employer owned or operated facilities.**

. . . **Secondary and post-secondary institutions should conduct area planning for occupational programs to make the subject matter coverage at each institution relevant to the needs of potential students and the local, state and national work force.**

. . . Secondary and post-secondary institutions should cooperate to provide inservice training for instructional and related staff. Workshops, seminars and methods of teaching developmental programs should be offered by the post-secondary institutions and be available to both secondary and post-secondary instructors. Each teacher should be required to attend at least one workshop, course or seminar every three years for purposes of updating their teaching skills and knowledges.

. . . Secondary and post-secondary representatives should work together to compile data which reflects the probability of success of students in the occupational programs. These data should be disseminated to appropriate secondary and post-secondary representatives to be used in their work with students.

. . . Occupational programs that are already offered should be completely utilized before they are duplicated in a nearby secondary or post-secondary institution.

. . . Post-secondary institutions should provide secondary institutions with adequate advance notice concerning possible changes or adjustments in program entrance requirements.

. . . Secondary and post-secondary institutions should cooperate in determining the service area in which new occupational programs should be established. Factors such as expense, availability to students, physical facilities and employer needs should be considered in making this decision.

The implementation of the suggested alternatives will help alleviate problems such as: duplication of courses at secondary and post-secondary institutions; duplication of equipment and facilities; fragmented and divergent curricula; development and implementation of new occupational programs; and communication between secondary and post-secondary institutions. The lack of coordinated occupational programs between the secondary and post-secondary institutions results in fragmented programs for many students. As a result, the occupational skills and knowledges obtained by the students in the secondary schools are not applicable to their chosen occupational program in a post-secondary institution. Institutions should develop cooperative plans for utilizing, to the fullest capacity, occupational programs, faculties, facilities and equipment. This should include offering classes at night and other times such that adults who are working full-time or part-time will have the opportunity for

retraining or updating of their occupational skills. This would mean that secondary facilities could be utilized in the summer, during the evening hours and weekends by post-secondary institutions and vice versa.

OPERATIONAL PROCEDURE 6

GUIDANCE AND COUNSELING OF STUDENTS

Secondary and post-secondary institutions should provide a coordinated counseling program designed to simplify and expedite the transition of the student. The activity of the counselors should be directed toward helping students understand the purpose, policies and requirements of the receiving institution and to help them assess their own abilities and interests toward career goals.

Counseling and guidance is at the heart of the articulation process. Potential students must be provided the opportunity to understand and select career goals based on pertinent and timely information. The counselor should provide important services to individuals in helping them to make educational and career choices and plans and to assist students in their progress towards a satisfying career.

Methods of Implementation:

. . . **The counseling staff should be of sufficient size to adequately provide guidance and counseling services to the students. Some states suggest a ratio of one counselor per 400 students; however, it is recommended that a more equitable ratio would be one counselor per 300 students.**

. . . **The counselor's office should be located where privacy and immediate and easy accessibility to students are provided.**

. . . **Occupational orientation activities and experiences should be provided for all counselors. All counselors should be familiar with the programs offered by the institution. Some full-time work experience outside of education could be required. Potential counselors could participate in cooperative education programs with employers to obtain occupational experience. Counselors could be required to obtain occupational experience through summer work stations, preferably with a variety of employers.**

. . . Secondary and post-secondary institutions should select counselors who are trained and capable of working with all human beings.

. . . Post-secondary institutions should utilize "peer-group" counseling activities to supplement the activities of the counseling staff.

. . . Every secondary and post-secondary institution should provide systematic opportunities for counselors to update knowledges about occupations, various institutions and counseling techniques. This could be accomplished through workshops, seminars, inservice training programs and cooperative education programs for the guidance and counseling staff.

. . . A team effort in guidance seems most appropriate. The post-secondary program faculty should become involved in guidance before the students enter a specific curriculum. The program faculty and counselor should cooperate in assisting the students with selection of program and career goals.

. . . Each post-secondary counselor should be responsible for specific secondary institutions to be visited on specified days and evenings at the invitation of the secondary schools. Post-secondary teachers should be included as a visitation team.

. . . Administrative support to the counseling staff and, perhaps, in conjunction with the library or media center, should be provided by secondary and post-secondary institutions for the purpose of obtaining career guidance materials, films, books, etc. . . .

Counseling and guidance activities are important for students throughout their educational experiences. It is basic to the success of many students. The implementation of these alternatives will help alleviate the following problems: communication between secondary and post-secondary counselors and faculties; size of counseling staff; competencies of the counseling staff; orientation programs; and definition of the responsibilities of the counselor.

OPERATIONAL PROCEDURE 7

ENTRANCE INTO AN INSTITUTION

Admission to post-secondary institutions should be organized into two distinct phases: entrance into the institution; and entrance into a program. Policies and procedures for institutional and program entrance should be developed, published and dissiminated to secondary and post-secondary students, (including full-time, part-time, adult and continuing education students), faculties, counselors, administrators and admissions personnel.

Admissions policies and procedures should be developed cooperatively by the appropriate secondary, post-secondary and employer representatives. Criteria for selecting students to attend institutions or to be admitted to programs should be specifically outlined. The skills and/or competencies needed by the student to enter programs and institutions should be delineated. When an institution practices "open-admission", it should state whether "open-admission" applies to institutional entrance only or to all specific programs.

Methods of Implementation:

. . . **Admissions personnel (registrar and staff) should work cooperatively with secondary and post-secondary representatives to develop institutional entrance policies and procedures. Specific criteria should be established and reviewed on a regular basis concerning institutional entrance. Only necessary information about a student should be requested by the receiving institution and should be used in an appropriate, confidential and objective manner.**

. . . **Policies and procedures for program entrance should be developed cooperatively by a Program Articulation Committee of secondary, post-secondary and employer representatives. The committee should meet on a regular basis to review and revise program entrance policies and procedures. (See Articulation Arrangements)**

. . . Post-secondary institutions should provide opportunities for students to remove any deficiency which may affect their entrance into an institution. Developmental programs should be utilized to provide students with opportunities for developing the competencies required for success in the post-secondary institution. (See Developmental and Special Programs for Students)

. . . Admission to a specific program should be clearly stated and published. A Program Admissions Committee, consisting of a program faculty member, the department head, and the counselor (or student's advisor in the absence of a certified counselor), should be established to provide procedures for appeal for students with special problems.

. . . High school students, who are capable and interested in advancement in their chosen field, should be permitted to enroll in courses at the post-secondary institutions which will aid them in meeting their goals. Appropriate credit for successful completion of these courses should be awarded the student at both secondary and post-secondary institutions. Enrollment may be part-time or after regular school hours.

. . . Students entering post-secondary programs should be enrolled at the program level of proficiency at which they are capable of performing, based on appropriate tests and other appraisal data. (See Student Appraisal)

. . . Post-secondary institutions should provide activities and experiences designed to make as simple as possible and expedite the interview and registration procedures for enrolling in the institution.

. . . Those programs which are outside the capabilities of physically handicapped students should be identified and standards for admission cooperatively developed by the Program Articulation Committee. (See Communications)

. . . Post-secondary institutions should publish those standards and policies which support selective admission. The student should be made aware of the selective admission

practices of the post-secondary institution before admittance procedures are initiated.

The implementation of these alternatives will alleviate problems such as: utilization of information on students requested by post-secondary institutions; selection of students; varying entrance requirements; widening the scope of accommodation to more varied student preparation, experience and expectation; and communication between secondary and post-secondary faculties. Entrance into an institution is an important step for students. If students are denied admission to an institution or program, they should be advised of the factors preventing admissions and informed as to what procedures or alternatives are available.

OPERATIONAL PROCEDURE 8
STUDENT APPRAISAL

Students should be admitted into the educational program at a level commensurate with the competencies they actually have attained in that particular area and should be allowed to proceed toward the attainment of their career goals without duplicate learning of previously acquired skills or competencies. The appraisal of the student's abilities, potential and interest, should be individually oriented with maximum benefit to the student and with minimum duplication of previous appraisal efforts. The post-secondary program faculties should strive to aid students in selecting and/or clarifying their program and occupational goals in terms of the labor market.

Each student entering a program has individual characteristics. Entrance into a program should utilize these characteristics to benefit the student. Special skills or competencies attained by the student in educational, employment or other situations should be assessed in placing the student in any program. A student should be subjected only to necessary testing; however, the skills and competencies the student has should be evaluated with the student in reaching realistic career goals. Secondary and post-secondary representatives should cooperatively exert an effort to make the student's exit from a secondary program and entrance into a post-secondary program as smooth as possible with minimum duplication of effort by the student.

Methods of Implementation:

. . . **The Program Articulation Committee should determine the completion requirements for each occupational program with assistance from the employer Advisory Committee. A uniform standard for completion of programs should be devised whether it be in terms of clock hours, credit hours or demonstrated competencies. These uniform standards should ensure that the students completing a program have the skills and competencies**

required for entry into the occupation for which they prepared with a probable capability for advancement. (See Communications)

. . . The program entry level of the student should be determined by a Program Admissions Committee composed of the counselor, the program instructor and the department head. The entrance competencies and completion requirements for all programs should be published and disseminated to secondary faculties, counselors, potential students and employers to provide students prior knowledge of educational and occupational requirements of their chosen career. (See Communications)

. . . Post-secondary institutions should utilize performance tests and individual interviews in evaluating the student for program entry. Performance tests should be developed for each program area and made available for those students with prior experience in that area whether educationally or employment oriented. The Program Articulation Committee should be knowledgeable about these performance tests.

. . . Interviews and advisement services for students with "non-traditional" or special educational and experience backgrounds should be utilized by post-secondary institutions. These interviews could be on a one-to-one basis or held with the Program Admissions Committee.

. . . Post-secondary representatives should recognize the inefficiency and biased nature of many standardized appraisal instruments in assessing the abilities and potentials of students. More emphasis should be placed on previous performance as indicated by documentation and interviews instead of scores made on appraisal instruments.

. . . A continuous record of the student's performance should be kept by the secondary and post-secondary institutions. A record of previous performance on a skills and competency checklist, signed by the instructor validating the skill or competency, is one method which could be used in lieu of testing. Another is satisfactory completion of previous course content with the amount of credit

awarded mutually agreed upon by instructors of both programs and the Program Articulation Committee.

. . . Post-secondary institutions should utilize performance-based advanced placement tests in assessing the entry level of the students. Advanced placement should be awarded students who satisfactorily display competencies in their selected occupational programs. The students should receive credit toward completion of their program in terms of clock hours, credit hours, or performance of competencies. The amount of credit to be awarded should be determined by the Program Articulation Committee.

There are many problems the student faces when entering a post-secondary program. It is important that the students be well-informed concerning the opportunities as well as requirements of their chosen career. In many instances, the students need to be given advice or assistance in making their career choice. The identification of the student's program and program objectives is one of the most critical decisions to be made by the student. It is at this point that the student needs, and should receive, help from the program faculty, department head and counselors. It is important that the student be accurately assessed and entered into a program. The students should be given the opportunity to begin the new program at the point of exit from high school or from an employment or military experience. For some students this necessitates advanced placement in some programs and for other students it may indicate developmental programs in some educational areas. The implementation of the suggested alternatives will assist in alleviating problems the student faces such as: program entrance; identification of program goals; selection of courses; meeting required prerequisites; meeting financial and other requirements; identification of deficiencies; advanced placement; transfer of occupational courses; evaluation of credit; and individual differences of the students.

OPERATIONAL PROCEDURE 9

DEVELOPMENTAL AND SPECIAL PROGRAMS FOR STUDENTS

Since many students enter post-secondary institutions with deficiencies in various educational and occupational areas, post-secondary institutions should provide developmental and special programs for those students. These developmental and special programs should be designed to strengthen the student's preparation and provide reasonable assurance that the student has the competencies needed to succeed in that particular program.

Some students enter an occupational program and find they are deficient in one or more areas. Students should be provided the opportunity to overcome any deficiencies which will impede their progress toward an occupational goal. The students should be alerted to these deficiencies before entering the program. The removal of deficiencies by students will better prepare them for successful completion of the program and will help in decreasing the drop out rate. Developmental, in this guide, refers to those activities or programs which takes students at their competency level and moves them to the competency entry level required for successful performance in a particular program.

Methods of Implementation:

. . . **Developmental programs should be established by post-secondary institutions to provide courses for upgrading the student in basic study areas such as math, science and communication and language skills. The programs should be developed on an individualized basis so that students may take them at any time. These programs should be available to the students during the regular schedule, evening schedule and summer schedule. The developmental program may extend the period of time required to complete the student's occupational program.**

. . . **Developmental courses to prepare the student to enter programs with required prerequisites should be offered by post-secondary institutions. If an occupational pro-**

gram requires previous experience or educational courses for entry into that program, these prerequisite courses should be made available for those students deficient in these courses and seeking admission to the program.

. . . Special services, such as tutorial services by peers or staff, should be provided by post-secondary institutions for students with educational deficiencies. Volunteer tutorial programs should be established through clubs and other student organizations. The institution should provide organized financial support for tutors and the staff of the program.

. . . Post-secondary and secondary institutions should develop specialized courses and/or programs and experiences for students who need these activities. The activities should be offered at hours available to students of all ages.

. . . All developmental courses should be designed such that they are related to the student's educational and occupational program goals.

. . . Post-secondary faculty members and counselors should endeavor to provide as much assistance as possible to handicapped or disadvantaged students seeking entrance to a program. If finances, facilities or other deterrents are factors for denying admission to these students, information and help should be provided to help the handicapped or disadvantaged student overcome these "road-blocks".

. . . Special orientation programs should be provided by post-secondary institutions to provide the students with knowledge about the institution and the occupational program they are entering. These orientation programs should be held prior to or during the first week of the student's attendance at the institution. Orientation programs should not be an added expense to the student.

. . . Exploratory programs and/or activities should be provided for those students who have not made appropriate educational or career choices. Special attention should

be given to career choice behavior of handicapped or disadvantaged students. Activities may include independent study, counseling and student appraisal services related to career decision making.

The implementation of these alternatives will help alleviate problems the student encounters in such areas as: deficient backgrounds; need for developmental courses; misunderstanding of the program and institutional policies; need of prerequisite skills or competencies; and need for tutorial assistance. Students entering a post-secondary institution may have differing abilities and backgrounds. The use of developmental and special programs will help make these students "teachable" by involved instructors. Developmental programs will permit many students to realize their full potential, increase enrollments and graduates, make more cost effective use of educational facilities and programs and add to the number of much needed specialized workers for the nation's workforce.

OPERATIONAL PROCEDURE 10

CONTINUING EDUCATION PROGRAMS

Secondary and post-secondary institutions should continually develop and offer occupational programs specifically designed for the adult population (those persons not in full-time educational programs). The career needs and abilities of the adults of the community and surrounding areas should be assessed as employment needs change. Occupational programs should be made available to those adults who desire training, retraining or up-dating in an occupational area or improved competencies in special areas of interest.

The largest potential student population in most communities is the adults. With constant fluctuations in work force needs and the advance in technologies comes the need for short-term and long-term occupational programs offered in an educational environment for the purpose of keeping the employee trained for the job. The work force of the nation must be given the opportunity to keep abreast of the requirements of the job. Those students attending continuing education programs come from all walks of life and represent all age groups. These students may be returning to the educational system after a number of years in the labor force, military or as a housewife. Some of these students will be seeking new careers. Whether these students are seeking programs of an avocational or vocational nature, secondary and post-secondary institutions should provide opportunities for these students to reach their specified educational and career goals.

Methods of Implementation:

. . . **Secondary and post-secondary institutions should have an adult or continuing education division designed to assess the career needs of the adults of the community. Secondary and post-secondary institutions should cooperatively determine what programs each institution is capable of offering. Care should be taken to avoid unnecessary duplication of offerings.**

. . . **Continuing education programs should be offered at a time and cost equitable for the adult students. This will probably necessitate that programs be offered during the evening hours and/or weekends to accommodate the adult student.**

. . . **The adult student should be given as much help as possible toward meeting the cost of continuing education programs. Employers will often pay a portion or all of the cost of these programs. This means that state, federal and private funds provided by employers should be used as a possible means to finance a share of the costs incurred by a continuing education program.**

. . . **Courses and programs of a social, cultural and/or artistic nature should be provided for the adult student. Many adults are interested in developing avocational interests which can only be provided through an adult or community education program which may lead to employment opportunities for some. The programs to be offered should be determined by proximity of students and availability of facilities and staff.**

The implementation of these alternatives should help in solving many of the problems facing the adult student and society. Some of the problems to be alleviated by these alternatives include adult employment; keeping up with the advancing technologies; providing occupational education for those needing upgrading on their jobs or preparation for new jobs; and improving the economic and social aspects of the community.

OPERATIONAL PROCEDURE 11

PROGRAMS AND SERVICES TO MEET SPECIAL NEEDS

Post-secondary institutions should provide programs and services to meet the special needs of some students. Student assistance programs should be available such as: financial aid programs; cooperative work programs; and work study programs.

Many students entering post-secondary institutions have special needs other than career training. In some cases, finances may be a deterrent to the student enrolling or remaining in a program. In other cases, students need special assistance because of a handicap or a deficiency in their background. Some students may need special assistance in overcoming language, reading or cultural differences.

Methods of Implementation:

. . . **Opportunities for financial aid should be made available to the occupational students. Placement activities should include locating part-time jobs for those students needing financial assistance. These part-time jobs could be within the educational institution or outside employers. More students might seek post-secondary occupational training if finances were not a hindrance.**

. . . **Post-secondary institutions should provide assistance to handicapped students seeking occupational training. Handicapped students should be made aware of their potential in the various occupational areas and assisted in deciding or clarifying what occupational program is best suited to their needs, interests and abilities.**

. . . **Secondary and post-secondary institutions should offer intensified short-term occupational programs for those students who have decided to seek employment. These programs should be specifically designed to bring the student to job-entry level so the student is employable.**

. . . Post-secondary institutions should provide special programs designed to assist students with special needs to attain their objectives. Special courses on social and human relations, as well as a history of the various cultures of America, would be useful. Education programs in a bilingual mode with bilingual teachers, counselors and, in some cases, tutors or other cultural interface personnel can increase the probability of success of many students with special needs.

These alternatives would help in alleviating problems the students face such as: financial difficulties; physical or mental handicaps; unemployment resulting from dropping out; and opening doors of opportunity for minority and ethnic groups in educational programs and society. This area in the educational program for many potential students is one that is usually neglected. In many cases, the failure of institutions to meet the special needs of the students has resulted in students either deciding not to enroll in post-secondary occupational programs or dropping out before completion.

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APPENDIX

A survey instrument listing operational procedures and methods of implementation was mailed to each of the following people. Each respondent was asked to give a rating for the value and usefulness of each operational procedure and method of implementation.

The project staff would like to thank these people for their contribution to the development of the suggested guide.

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